vae acutum, but there is reasonable doubt that these organisms have any causal relationship to the condition. These organisms were present in Curth's second case.³

After considering the above conditions, this patient was thought to have the triple symptom complex as described by Behcet' because of the insidious onset, the type and location of the lesions, the recalcitrance to all forms of therapy, the conjunctivitis, and the formation of pustules at the sites of skin abrasions from intracutaneous and subcutaneous injections. Iritis leading eventually to hypopion is the usually described eve condition associated with triple symptom complex. The diagnosis in the case presented might be challenged since only conjunctivitis was present. However. Behcet² points out that eye lesions may not be present and Franceschetti and his coworkers6 state that the first sign of eye involvement may be photophobia and irritation of the ball, and that iritis and hypopion may develop only very late in the disease. Moreover, the skin manifestations are usually, but not always, present for some time before any eye symptoms appear. Since iritis is a manifestation of disease elsewhere in the body, it is not surprising that it sometimes develops in association with these chronic recurrent ulcers

The ophthalmologist who observed the patient suggested that the eye picture in the case being presented might be due to contamination from the oral and genital lesions. That theory was partially borne out by the finding of identical pigment-producing, coagulase-positive staphylococci in the nasopharynx and in the eye. However, these organisms were found in the eye but once. Only time will tell what picture the uninjured eye will eventually develop.

The extensive laboratory investigations to which this patient was subjected revealed nothing relative to the cause. The low seventeen ketosteroids had not been previously found, but therapy in the form of testosterone did not result in any improvement; this finding probably had nothing to do with the skin picture. The investigations of one set of samples for viruses were negative as were similar investigations reported by Curth.³ The elementary bodies described by Behcet² were not found. Aside from streptomycin, testosterone, and tyrothricin, all therapy used on our patient had been tried previously on patients with this condition.

SUMMARY

The case of a 17-year-old white male who has recurrent painful ulcers of the oral cavity and genitalia, as well as recurrent conjunctivitis, is presented. This patient is thought to have the triple symptom complex described by Behcet. No cause was found for the condition and no treatment has appreciably influenced the course of the disease. 1520 Chapala Street.

REFERENCES

- 1. Behcet, H.: Uber rezidivierende aphthose durch ein Virus verursachts Gesehwure am Mund, am Auge, und an den Genitalien, Dermatologische Wochenschrift, 105:1152 (Sept. 4), 1937.
- 2. Behcet, H.: Some observations on the clinical picture of the so-called triple symptom complex, Dermatologica, 81:73 (Feb.), 1940.
- 3. Curth, Helen Ollendorf: Recurrent genito-oral aphthosis and uveitis with hypopion (Behcet's syndrome) report of two cases, Arch. Dermat. & Syph., 54:179 (Aug.), 1946.
- 4. Ephraim, Herman: Triple symptom complex of Behcet, Arch. Dermat. & Syph., 50:37 (July), 1944.
- 5. Fordyce, cited in Ormsby and Montgomery, diseases of the skin, Ed. 6, page 1329 Lea & Febiger, Phila., 1943.
- 6. Franceschetti, A., Valerio, M., and Babel, J.: Recurrent aphthous uveitis with mucocutaneous lesions, Arch. Ophth., 35:469 (May), 1946.
- 7. Touraine, A.: L'aphthose, La Presse med., 49:571 (May 28-31), 1941.

Carcinoid of the Appendix, Simulating Closely Primary Carcinoma of the Appendix

MELFORD B. JORGENSEN, M.D., Los Gatos

THIS is the report of a case of carcinoid of the appendix that closely simulated primary carcinoma of the appendix. This case was somewhat unusual in that there was a history typical of recurrent attacks of acute appendicitis of ten years' duration, and some of the attacks had been quite severe. One month before the patient was operated on, she had a moderately severe attack. She wanted to postpone operation, if possible, for a month or two, when she could have a uterine suspension, ovarian cystectomy, and conization of the cervix, as well as the appendectomy.

Both Foot and Boyd intimate that carcinoid tumors are usually found at operations for other conditions than disease of the appendix, or at necropsy. Carcinoid tumor of the appendix is found in 0.3 to 0.4 per cent of appendices removed surgically, according to Boyd. This condition has been described in the literature as primary carcinoma of the appendix, and the case here reported was originally thought to be one of primary carcinoma. Five pathologists, however, were of the opinion that the tumor was carcinoid.

True adenocarcinoma of the appendix is extremely rare. Boyd states the histological picture suggests carcinoma, while the clinical course is usually that of a benign lesion. In 90 per cent of the cases the lesion is situated near the tip of the appendix. The appendix is usually not elongated. but may be broader than usual, and firm. A membrane may be present on the surface. Cross-section reveals a yellow ring which encircles the appendix and appears to be situated in the submucous coat. This is due to a lipoid material. Microscopically the tumor consists of spheroidal cells, arranged in very definite groups or masses suggestive of a carcinoma, and although never showing a true gland-like arrangement, sometimes the cells may be grouped around a rather atypical and irregular lumen, as they were in this case. Although usually confined to the mucous and submucous coats, the cells may penetrate the muscularis, and even the subserous coat, as they did in this case.

Carcinoid tumors may be found in any part of the gastrointestinal tract, although most frequently in the small intestine, where they are often multiple. In the appendix they are always single.

CASE REPORT

The patient, a 37-year-old white married woman, was first observed February 3, 1947, because of steady, dull pain of three days' duration in the right lower quadrant of the abdomen. There had been some nausea but no vomiting. Bowel movements were normal. Past history revealed recurrent episodes of similar distress over a period of ten years. The patient had also had considerable dysmenorrhea since puberty, and had had considerable low back pain in the preceding five years. There was a persistent vaginal discharge which had begun three years previously. The patient was well developed and well nourished and was not acutely ill. The temperature was 99.6° F., the pulse rate 86, and the blood pressure 120 mm. of mercury systolic and 80 mm. diastolic. Heart and lungs were normal. The abdomen was flat with slight rigidity and moderate tenderness in the right lower quadrant and there was slight rebound tenderness. Rectal examination disclosed no abnormality. Upon examination of the pelvis the cervix was found to be moderately eroded and everted, and the uterus was retroverted. There was a cyst measuring 3 x 4 cm. in the left ovary, which was tender. The right adnexial region was moderately tender.

Examination of the blood showed hemoglobin 88 per cent (15 gm. per 100 cc.). Erythrocytes numbered 4.3 million and leukocytes 10,300 with normal distribution of polymorphonuclear cells, lymphocytes, stabs, segmented cells and monocytes. A Wassermann test of the blood was negative. Urinalysis was normal.

The diagnosis of recurrent appendicitis was made and the patient was observed closely. On February 26, 1947, she was operated upon. The appendix, which was elongated and moderately broad, lay retrocecal and was completely bound down to the posterior surface of the cecum by dense adhesions. It was surrounded by moderate inflammatory reaction. The uterus was retroverted and there was moderate relaxation of the supporting ligaments. A cyst measuring 3 x 4 x 3 cm. was found in the left ovary. The cervix was moderately eroded and everted.

Operation consisted of uterine suspension, ovarian cystectomy, appendectomy, and conization of the cervix.

Pathological Report: The appendix was 5 cm. in length and 0.7 cm. in thickness at each end. In the distal third there was a localized fusiform swelling involving the entire appendiceal wall and measuring 1.2 cm. in thickness. At the swelling the wall was yellow, the lumen being obliterated by firm, vellow-white mucoid-appearing material. Microscopic examination of sections showed the serosal surface to be intact. It was covered with flattened spindle-shaped cells. The subserosal connective tissue was sparse but in some areas contained dilated blood vessels engorged with blood. Longitudinal and circular muscular coats were well defined, but the mucosa was totally altered by the presence of a tumor made up of large, rounded islands of cells. Between these islands were elongated, irregularly shaped strands and columns of tumor cells packed fairly closely together and infiltrating the stroma without limits. These cells had invaded the muscular walls in many places, and in one area were present in the subserosal connective tissue adjacent to the serosa. Wherever seen the cells were similar in character, being fairly small and round, with scanty cytoplasm and round to ovoid nuclei which were dark staining, with discrete nuclear membranes and dusty particles of chromatin material dispersed throughout the nucleus. Some contained fairly well defined, slightly irregularly outlined nucleoli in their central portions. Mitotic figures were not observed.

Diagnosis: Argentaffinoma (carcinoid), appendix.

The patient made a very satisfactory recovery and was dismissed from the hospital on the sixth postoperative day. Examined every two months since leaving the hospital, she has had no complaints other than of an occasional pain in the right lower quadrant, where slight tenderness has persisted. Otherwise the abdomen appears to be normal.

COMMENT

These rare tumors of the appendix are of interest to the surgeon because of the differential diagnosis, and because they may be the source of a metastatic lesion, the treatment of which may be somewhat of a problem, with necessity for fairly close observation of the patient for many years. The great majority of the patients are completely cured by removal of the carcinoid tumor.

As a rule a carcinoid tumor behaves in a benign manner, although it may infiltrate the wall of the appendix. It may, however, metastasize to the regional lymph nodes and also to the liver. Metastasis is more likely to occur from a carcinoid tumor in the small intestine than from one arising in the appendix. Metastases are, however, always slow to occur and slow to cause termination. Boyd states metastatic lesions have been found as late as 20 years after a carcinoid tumor was removed.

Many of the cells of a carcinoid tumor contain granules which stain black with silver salts (argentaffin) and yellow with chromium salts (chromaffin). A relationship exists between carcinoid tumors and argentaffin-cell neuromas. Apparently the paraganglionic cells in the plexus of Meissner and Auerback have something to do with the origin of the tumor. Some believe that this may be the origin of the so-called "neurogenic appendix."

Corner Massal and Saratoga Avenues.

REFERENCES

Boyd, Wm.: Textbook of pathology, Philadelphia, Lea and Febiger, 1947.

Foot, N. Chandler: Pathology in surgery, Philadelphia, Lippincott, 1945.

Disseminated Coccidioidomycosis: Isolation of Causative Organism from the Urine

MERVIN J. GOLDMAN, M.D., and ELI MOVITT, M.D., Oakland

IN the case of disseminated coccidioidomycosis which is reported here, a very unusual feature occurred which, to the best knowledge of the authors, has never been reported previously.

CASE REPORT

A 27-year-old negro male was admitted to the Oakland Veterans Administration Hospital January 28, 1947. The patient was born and reared in Paris, Texas. He served in the Army from February, 1942, to August, 1944, most of the time in Louisiana. He had no overseas service. The past history was negative except for syphilis contracted in 1942 and treated for six months with mapharsen and bismuth with subsequent negative results of blood and spinal fluid examinations. A review of Army medical records revealed repeatedly negative chest roentgenograms. Upon release from the military service the patient came to Oakland, California. In the latter part of 1946 he moved to Madera, California (located in the San Joaquin Valley), where he worked as a crop picker up to the time of the present illness which began December 1, 1946, with chills, fever, cough, and right chest pain. He was treated at a local hospital for right lower lobe pneumonia with penicillin and was discharged January 1, 1947. He continued to feel weak, and had a cough productive of small amounts of green sputum. On admission to the Oakland Veterans Administration Hospital the temperature was 102° F., pulse rate 110, respirations 24 per minute and blood pressure 100 mm. of mercury systolic, 60 mm. diastolic. The patient appeared acutely ill and showed evidence of considerable weight loss (height 73 inches, present weight 135 pounds, average weight 152 pounds). No palpable lymph nodes were present. The lungs were clear to percussion and auscultation and the remainder of the physical examination was negative. The routine and follow-up laboratory data are shown in Table 1. The Kahn test of the blood was negative. The blood urea nitrogen was 12 mg. per 100 cc. A roentgenogram of the chest, taken on admission, was reported as follows: "The cardiac shadow appears normal. Both lung roots are moderately prominent and there are some faint exudations in the right mid-lung field with an area 1 cm. in diameter which may represent a cavity. On

From the Medical Service, Oakland Veterans' Hospital. Published with permission of the Chief Medical Director, Department of Medicine and Surgery, Veterans Administration, who assumes no responsibility for the opinions expressed, or conclusions drawn, by the authors.